# NINDS CDE Notice of Copyright Short Form 36 Health Survey (SF-36) walk-wheel Modification for Spinal Cord Injury

Availability:	Short Form-36 Health Survey Walk Wheel Modification Journal Link  The original SF-36 (i.e., SF-36 v1) is freely available in public domain:  The RAND Coorporation Short Form 36 Health Survey Instrument Link
Classification:	Supplemental: Spinal Cord Injury (SCI)
Short Description of Instrument:	Construct measured: Health-related quality of life  Generic vs. disease specific: Generic
	Means of administration: Interview or Self-Administered
	Intended respondent: Individual with SCI
	# of items: 36
	# of subscales and names of sub-scales: 8 – Physical Functioning, Role –Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional, Mental Health
	# of items per sub-scale: Varies

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### Instructions:

**Scoring:** The same scoring is used for the SF-36 ww modification for SCI population as for the standard SF-36.

The scoring system is relatively complex and generates subscale scores for physical functioning, role limitations due to physical problems, bodily pain, general health perceptions, vitality, social functioning, role-limitations due to emotional problems, and mental health. There is no single overall score, instead, It generates eight subscales and two summary scores: the Mental Health Component Score and the Physical Health Component Score (Ware et al 1993; McHorney et al 1993).

The standard SF-36 instrument asks participants to reply to questions according to how they have felt over the previous week. The items use Likert-type scales, some with 5 or 6 points and others with 2 or 3 points. Sample items include "How much bodily pain have you had during the past 4 weeks", and "How much of the time during the past 4 weeks have you felt so down in the dumps nothing could cheer you up?" Widely used the SF-36 has excellent psychometrics. Normative data with frequency distributions of scores and percentile ranks are documented in Ware et al., 1993 and 1994 (Ware et al 1993; Ware and Kosinski, 1994; <a href="http://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/medical-outcomes.aspx">http://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/medical-outcomes.aspx</a>).

**Background:** The standard Short Form-36 was derived from the General Health Survey of the Medical Outcomes Study by Stewart and colleagues (Stewart et al 1998; Hays et al 1995). It is one of the most widely used generic measures of health-related quality of life and has been shown to discriminate between subjects with different chronic conditions and between subjects with different severity levels of the same disease. This instrument addresses health concepts that are relevant to patients from the patient's perspective. The standard SF-36 is one of the components of the MSQLI as well as the MSQOL-54 and was included in these instruments to serve as a generic health-related quality of life measure that could provide a basis for comparison between the MS patients and other populations (Ware et al 1993; Newnham and Harwood, 1997).

### Rationale/ Justification:

SF-36ww modification for SCI population was published by Lee et al 2009. This modification addresses the problems of significant floor effects due to the inability of some individuals to perform some of the physical tasks described in the SF-36. It was also felt that questions related to walking and stair climbing may be considered insulting or irrelevant for some individuals with SCI. The modified SF-36ww includes three additional questions, in which the word "walk" was replaced with "wheel" for three of the physical function questions (Lee et al 2009). It is recommended that questions concerning wheelchair use be completed by the main mode of wheelchair used by the respondent. For example, if a person uses both manual and power wheelchairs, they should score the chair they use most at the time of the assessment. Individuals in situations such as complete bed rest should score based on their current restrictions.

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#### **References:**

Ware Jr. JE, Snow KK, Kosinski M, Gandek B. SF-36 Health Survey: Manual and Interpretation Guide. Boston, MA: The Health Institute, New England Medical Center;1993.

McHorney CA, Ware JE, Jr., Raczek AE. The MOS 36-Item Short-Form Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. Medical care. 1993;31(3):247-263.

Ware JE, Kosinski M, Keller SD. SF-36 Physical and Mental Health Summary Scales: A Users' Manual. Boston, MA: The Health Institute;1994.

Association AP. Medical Outcomes Scale SF-36. 2015; http://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/medical-outcomes.aspx. Accessed 10 September, 2015.

Stewart AL, Hays RD, Ware JE, Jr. The MOS short-form general health survey. Reliability and validity in a patient population. Medical care. 1988;26(7):724-735.

Hays RD, Shelbourne CD, Mazel R. User's Manual for the Medical Outcomes Study (MOS) Core Measures of Health-Related Quality of Life. Santa Monica, CA: RAND corporation; 1995.

Newnham EA, Harwood KE, Page AC. Evaluating the clinical significance of responses by psychiatric inpatients to the mental health subscales of the SF-36. Journal of affective disorders. 2007;98(1-2):91-97.

Lee BB, Simpson JM, King MT, Haran MJ, Marial O. The SF-36 walk-wheel: a simple modification of the SF-36 physical domain improves its responsiveness for measuring health status change in spinal cord injury. Spinal Cord. 2009;47(1):50-55.